

Claims

- [c1] 1. A wafer cleaning apparatus comprising:
 - a trough;
 - a wafer holder disposed in the trough for holding a plurality of wafers;
 - a rolling device disposed in the trough, wherein the rolling device is in contact with the wafers on the wafer holder for rotating the wafers on the wafer holder; and
 - a fluid injecting device disposed in the trough for supplying cleaning liquid for cleaning the wafers.
- [c2] 2. The wafer cleaning apparatus of claim 1, wherein the rolling device comprises at least one roller, wherein the roller is disposed on at least one side of the wafer holder positioned perpendicular to the surface of the wafers and contacts with the edges of all of the wafers.
- [c3] 3. The wafer cleaning apparatus of claim 2, wherein the rolling device further comprises a motor for driving the roller to rotate.
- [c4] 4. The wafer cleaning apparatus of claim 1, further comprising a chemical fluid supplier, wherein the chemical fluid supplier is connected to the fluid injecting device.

- [c5] 5. A wafer cleaning apparatus comprising:
a trough;
a wafer holder disposed in the trough for holding a plurality of wafers;
a rolling device disposed in the trough, wherein the rolling device contacts with the wafers for rotating the wafers on the wafer holder; and
an adjustable fluid injecting device disposed in the trough for supplying cleaning liquid for cleaning the wafers, wherein the adjustable fluid injecting device is capable of adjusting the direction of the cleaning liquid injection from the fluid injecting device.
- [c6] 6. The wafer cleaning apparatus of claim 5, wherein the rolling device comprises at least one roller, and the roller is disposed on at least one side of the wafer holder positioned perpendicular to the surface of the wafers and contacts with the edges of the wafers.
- [c7] 7. The wafer cleaning apparatus of claim 6, wherein the rolling device further comprises a motor for driving the roller to rotate.
- [c8] 8. The wafer cleaning device of claim 5, wherein the adjustable fluid injecting device further comprises:
a turning device; and

a fluid injecting inlet disposed on the turning device, wherein the fluid injecting inlet can alter the angle of fluid injection via the turning device.

- [c9] 9. The wafer cleaning device of claim 5, wherein the adjustable fluid injecting device further comprises:
 - a transmitting device; and
 - a fluid injecting inlet disposed on the transmitting device, wherein the fluid injecting inlet can alter the position of fluid injection via the transmitting device.
- [c10] 10. The wafer cleaning device of claim 5 further comprising a chemical fluid supplier, wherein the chemical fluid supplier is connected to the adjustable fluid injecting device.